

The Netbook Trial

'In Their Hands'

21 Steps to 1-to-1 Success Summary

*Every
child,
every
opportunity*



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This document is also available on the internet at:
<http://www.education.vic.gov.au/netbooks>

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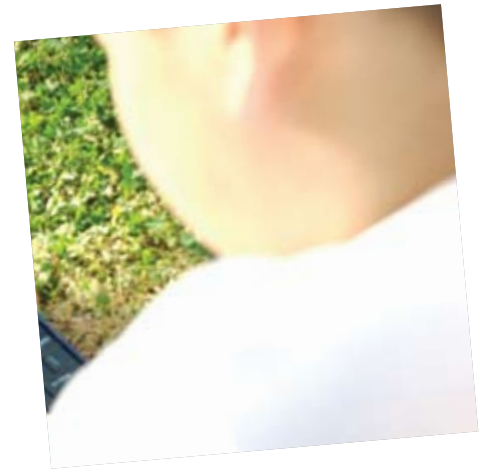
21 Steps to 1-to-1 Success

1-to-1 programs provide students with personal portable computers to maximise their opportunities for learning. Netbooks help schools engage the digital generation by nurturing individual (or 1-to-1) learning experiences. Increasingly, there has been a global move towards implementing 1-to-1 programs in schools. Of greater interest is how netbooks are being used for learning in ways that deepen understanding of concepts and advance knowledge of how to use digitally rich ICT environments for teaching and learning.



1-to-1 programs are an element in an international move towards individualising learning, which can increase independence and self-initiated learning in students and extend their learning beyond the classroom. Students who have their own device have been found to take greater pride and ownership over the knowledge they create, with a flow-on to more flexible forms of schooling. 1-to-1 programs have been found to extend formal learning communities to include parents or carers, siblings and other people important in students' lives. Also, the programs may lead to initiating global communication and collaboration and develop creative expression.

This document outlines the four phases to successful implementation. A brief summary of the 21 steps to successful implementation of 1-to-1 program is presented.



Additional resources and support materials, including planning checklists, sample project plans, sample policy handbooks, Frequently Asked Questions, case studies and more, have been developed to support Victorian schools.

Successfully implementing the 1-to-1 program relies on an equal focus on:

- a strongly supported vision and culture across the whole school community
- effective technical infrastructure and support
- development of student-centred pedagogies, and
- professional learning for staff.

Getting started

The 21 step sequence is inter-relational and may be considered out of this printed order. These steps provide guidelines to leadership teams considering implementing a 1-to-1 program.

Planning

How do we plan for 1-to-1 learning in the school?



Step 1: Consider current research

Consider how school leadership will research and establish the eLearning/ ICT vision for the school. Explore current research and case studies to enable you to learn about how schools have implemented 1-to-1 programs and to build your school's vision for how the program will improve student learning outcomes.

Issues to consider

- How are other schools throughout the world implementing 1-to-1 programs?
- What can you learn from these schools to ensure a successful implementation of a quality 1-to-1 program in your school?
- How will you model or adapt what other schools are doing in regard to 1-to-1 programs in your school?
- How were improvements in learning measured?
- What other criteria or assessments indicate the programs you have researched were successful?
- How will you measure success of the 1-to-1 program in your school?
- Have you considered the school's data such as student data and ePotential ICT Teacher Capabilities Survey data as part of your research into 1-to-1 programs? Can you demonstrate the link between moving to a 1-to-1 program and improving student learning outcomes to obtain broad school support?

- Have you gained an understanding of the scope and complexity of successfully implementing a quality 1-to-1 program?
- What will be the major obstacles in implementing a 1-to-1 program in your school? How can you overcome these obstacles?
- How will secure the school community's commitment to the eLearning vision?

Resources

- [Deploying 1:1 eLearning Environments for the 21st Century \(Intel\)](#).
- Sample documents to assist leaders to design and build 1:1 eLearning environments are available on the [1-to-1 Showcase](#).

Step 2: Establish the eLearning vision for 1-to-1

Consider how the vision statement will provide guidance, serve as the foundation of your decisions and inform the direction of your program. The vision will articulate how and why a 1-to-1 program will lead to improvements in student learning outcomes.

Issues to consider

- How can you ensure responsibility for leading 1-to-1 is distributed and shared?
- How can you establish and foster a shared 1-to-1 vision?
- What will 21st century learning look like in your school?

- How will classroom practice leverage technology to improve students' learning outcomes?
- What advantages are there in using technology in all areas of curriculum, including literacy, mathematics and science.
- To what extent should the introduction of a 1-to-1 program improve teachers' ability to personalise student learning?
- What are your plans to continually improve staff understanding of what 1-to-1 learning might make possible for students?

Resources

- The [eLearning Planning Showcase](#) provides a range of documents to support developing eLearning plans for schools.

Step 3: Engage school council

Consider how to be transparent and concise.

Issues to consider

- Have you provided your school council with research and stories from other 1-to-1 schools?
- Do parents understand the reasons for moving to a 1-to-1 program and support the decision?
- Has the school council participated in building the vision for 1-to-1 learning?

Step 4: Develop communication strategies

Provide communication to stakeholders linking the 1-to-1 learning environment and key strategies from the eLearning Plan.

A successful communication strategy requires the full involvement of key staff and other interested people. Meet with these people to determine the strengths, weaknesses, opportunities and the potential obstacles in implementing the vision. Then prepare a communication strategy. This may include elements to build understanding of ongoing support for your vision such as:

- presentations to parent groups
- presentations to neighbouring schools and kindergartens
- presentations to business and community groups
- a newsletter that promotes your vision for eLearning in education in your school
- articles for regional newspapers
- promotion of your eLearning vision on your school website.

Issues to consider

- Can your staff articulate the vision?
- How can you demonstrate to teachers some of the exciting things students may use netbooks for?
- Have you conducted parent information night sessions (with handouts)?
- How will you publicly celebrate success of the 1-to-1 program?
- How will you provide parents with basic training in the use and care of the netbooks?
- Have you considered timing

implications in releasing information? For example, a 1-to-1 program may save a parent or guardian from buying a home computer as a present.

- Have you provided a range of opportunities for parents to learn about the program, informed them of related school policies and answered all their questions?

Resources

- A series of parent induction programs could be offered, and may even be mandatory if a child is to participate in this program. Induction programs may cover:
 - care/maintenance of the netbooks
 - roles and responsibilities
 - restrictions
 - policies and procedures for participating in the school's 1-to-1 program.
- Suggested responses to Frequently Asked Questions (FAQs) have been placed on the [1-to-1 Showcase](#).
- The [School Communications Toolkit](#) offers ideas and advice to support schools in their communication with parents and the local community. It includes fresh insights, tips, pro formas, checklists, communications policy information and case studies.
- The [School Communications Plan Action Planner](#) is a template to assist schools in improving their communications and is supported by [Hints and Ideas for School Communications Plan Action Planner](#).



Step 5: Conduct a detailed readiness assessment

Use the School ICT Progression Strategy (SIPS), eLearning Plan, ePotential ICT Capabilities Survey data and student data to evaluate readiness to initiate a 1-to-1 program.

An assessment of the current 'state of play' will provide the foundation on which to build a strategic path to where you want to be. Prepare a readiness assessment that considers your current resource position on:

- ICT and infrastructure
- personnel
- facilities.

The focus of the readiness assessment then is to gain an objective snapshot of the readiness of the school to initiate a 1-to-1 program, its strengths and areas requiring attention. You may already have current data available through the development of your School ICT Progression Strategy, eLearning Plan and ePotential ICT Capabilities Survey.

If not, completing this documentation will provide you with a strong evidence base on which to develop your ongoing plan.

Issues to consider

- What ICT is currently available and how might it support the 1-to-1 program?
- What is the level of technology skills and understanding of your staff?
- What can your school's wiring and electrical system support?
- Is there sufficient air-conditioning and security in the learning space?
- What is the standard of routers, hubs, servers, CD towers and other key network equipment?

Resources

- The [ePotential ICT Capabilities Resource](#) provides schools with an ICT capabilities framework, online survey, planning tools and bank of resources to support the development of teachers' ICT capabilities within a learning and teaching context.
- [School ICT Progression Strategy](#): The purpose of the School ICT Infrastructure Roadmap is to detail a broad infrastructure, support and costing roadmap required to support

the eLearning goals, strategies and curriculum specified in the school eLearning plan.

- [eLearning Planning Showcase](#).

Step 6: Develop a project plan

Include a manageable time line outlining key milestones for the trial implementation, including a communication plan within the project plan.

Issues to consider

- What are the key targets and outcomes of your project?
- Who will coordinate the trial?
- What is the implementation time line?

Resources

- A Gantt chart allows for a quick visual reference to allow the project coordinator and others to ascertain the current state of the implementation timetable. A sample Gantt chart outlining key milestones is available on the [1-to-1 Showcase](#).

Step 7: Prepare a detailed budget

Provide a detailed budget, ownership and finance model.

Issues to consider

- Have you listed all the components that your 1-to-1 program will require, including:
 - the individual netbook
 - software and bag
 - servicing and insurance costs
 - technical support and infrastructure costs and initial and ongoing staff development costs?

- Have you considered one-off grants and ongoing funding strategies?
- How much will additional technical support cost?
- How much will additional internet services cost?
- Have you considered additional power, physical security and storage and infrastructure costs?
- Have you considered any additional costs for new software and upgrades?
- Will you quote parents for additional costs such as USB drives, hard-cased school bags, spare power cable, batteries, etc.?

Step 8: Select a preferred ownership and finance model

Issues to consider

- What parent and guardian contributions will be required and expected?
- Is the funding model sustainable?
- Have you considered all possible options for receiving supplemental funds, such as parent contributions, government grants for items such as one-off infrastructure costs and corporate or philanthropic support?

Supplier partnership opportunities

- What are the performance measurement criteria for your partnership with the supplier and how often will the partnership be reviewed?
- Who are the ‘teacher champions’ within your school?
- Is the netbook strong enough, durable enough and light enough for students?

Finance model

The equity model for the Netbook Trial will involve a co-contribution model involving regions, schools and parents. The parent payment contributes towards the cost of the netbook and allows for access anywhere, anytime during the school year. Research shows that where parents make a contribution to a netbook there is a greater sense of ownership, which leads to more responsibility towards the care of the netbook. Parent contribution is also a driver towards sustainability of a 1-to-1 program.

The financial contribution towards the trial will entail:

Regions \$105 per netbook

Schools \$80 per netbook

Parents \$156 per netbook
(the equivalent of \$52 per year)

DEECD has entered into an agreement to provide the Lenovo IdeaPadS9 and ACER Aspire One as the netbooks of choice for the Netbook Trial. Lenovo and ACER have established relationships with DEECD that signal a commitment to working with DEECD to improve educational opportunities for Victorian students.

Preparing

What 1-to-1 devices should we select?

How will they be used for 1-to-1 learning?

Step 9: Ensure teachers are optimising use of notebooks

Teachers should be comfortable with eLearning in the classroom and be actively using their own notebooks for learning and teaching.

Issues to consider

- Have you developed a strong community of practice supported by coaches or mentors?
- Are staff aware of what is currently available to support 1-to-1 learning?
- What support structures exist for change-resistant staff?

Step 10: Professional learning

Identify and deliver professional learning to support the introduction of 1-to-1 to enable improved learning. Improved student learning is at the core of any school professional learning strategy.

While it is easy and natural to focus on the logistics of ICT integration, professional learning is the critical priority. A comprehensive ICT professional learning program needs to develop teacher skills and confidence but most importantly it must help teachers develop new pedagogies for new technologies.

The Seven Principles of Highly Effective Professional Learning call for professional learning that is collaborative, embedded in teacher practice and aimed at bridging the gap between what students are capable of doing and actual student performance. Professional learning that is consistent with the principles is ongoing, school-based and directly relevant to the daily work of teachers.

Issues to consider

- How are you using ePotential data to inform your professional learning plan?
- Who are the 'teacher champions' within your school?
- What is your school's ongoing professional learning plan?
- What peer network support structures have you considered or implemented?
- How will you organise for a peer coaching program to support teachers in implementing a 1-to-1 program?

Resources

- **ePotential ICT Capabilities Resource:** Supports teachers developing their skills to integrate ICT into their classrooms and teaching practice.
- **ICT and eLearning Resources – Professional Learning:** ICT and eLearning resources available from the DEECD website.
- **Professional Learning in Effective Schools:** The Seven Principles of Highly Effective Professional Learning.

Step 11: Learning places and spaces

Consider how the use of technology and flexible learning places and spaces in the school can maximise learning opportunities.

How does the school provide, maintain and update ICT infrastructure and learning spaces to optimise learning opportunities by:

- providing learning in safe and secure, learner-centred, flexible learning spaces and connected digital environments
- exploring virtual learning environments and providing access to learning resources outside of school hours, and
- planning and resourcing for equitable ICT access for all students?

Issues to consider

- Do your learning spaces cater for different learning modalities?
- Are the spaces flexible and engaging?
- How do classrooms reflect the school's educational philosophy?
- How do flexible learning spaces reflect teachers' pedagogical beliefs?

Resources

- **Glen Waverley Secondary College:** QTVR – take a virtual tour of Glen Waverley Secondary College with hotlinks outlining how spaces are used for teaching and learning.
- **Innovation Next Practice – Echuca:** Examples of innovative uses of learning spaces and places at Echuca High School.

Step 12: Software, tools and online resources

Ensure the software selected reflects the learning and teaching goals of the school and is appropriate for the netbook.

Before purchasing additional software, be clear on the learning objectives you are seeking in each class and how the software will support these objectives. Software companies now are developing more appropriate licences for 1-to-1 initiatives. Open source software should also be considered as a cost-effective alternative.

Issues to consider

- How do the school's existing software selection policy/procedures reflect the learning and teaching goals of the school?
- Does the software have enough functionality to support your present and future needs?
- Does the school have all the required software licences? What are the limitations of your software licences? Can software be used at home and at school? How many netbooks can be loaded with the software?

Resources

- With the help of classroom teachers, DEECD has researched and designed a standard image for netbooks which incorporates both DEECD licensed and free open source software. This image has also been developed to aid students in meeting requirements of the Victorian Essential Learning Standards (VELS) domains. Schools and students may load additional software to meet their needs subject to appropriate copyright and licensing laws.

Step 13: Suppliers and \$\$

Explore supplier partnership opportunities and types of netbooks.

Issues to consider

- Is the netbook strong enough, durable enough and light enough for students?
- Will the netbook offer sufficient speed and memory to run required applications?
- Can the supplier offer a suitable guaranteed turnaround time?

Step 14: Calculate the total cost of participation

An accurate and detailed total cost of participation must be provided to parents before inviting them to join the program.

It is not acceptable to advise a lower cost and then ask parents to provide a greater contribution when costs were forgotten or not included. It is recommended that schools calculate the total cost of participation in the program, taking into consideration that the cost for components (including software) may vary depending on the needs of students and the school.

Issues to consider

- How much will additional technical support cost?
- How much will additional internet services cost?
- What are the additional power, physical security, storage and infrastructure costs?
- Will you quote parents for additional

items such as USB drives, software, hard cased school bags, spare power cables, batteries, etc?

Step 15: Support documentation

Define essential policies.

Issues to consider

- Have you discussed your policies with a range of audiences?
- Do these policies support student learning possibilities?
- What processes will ensure policies are updated and reviewed?
- How will policies be implemented?

Resources

A sample policy handbook has been developed to give schools examples of important issues and ideas that should be discussed with parents, students, technical and teaching staff. It is available on the [1-to-1 Showcase](#).

Step 16: Prepare responses to anticipated questions

Preparing answers to anticipated questions will maximise your chances of gaining broad community support for your initiative.

Also, it will demonstrate your school's preparedness to move to a 1-to-1 program.

Issues to consider

- Are you confident you can answer potential questions from parents?

Resources

- A Frequently Asked Questions document is available on the [1-to-1 Showcase](#).

Implementing

How do we enact 1-to-1 enabled learning in the school?

Step 17: Onsite service structures

Introducing additional netbooks into any school will have a significant impact on technical support staff and resources.

ICT support must be carefully planned. Provide a physical space as a first point of contact and provide onsite technical support.

Issues to consider

- Have you taken steps to ensure enough staff to support the netbooks when they arrive?
- Have you considered recruiting student helpers and trainees?
- Will you carry an inventory of spare parts or stock?
- Do you have processes to ensure effective support, including job log facilities and remote imaging capabilities?
- Have you allocated and prepared a physical location for onsite support?
- Have you considered purchasing spare netbooks?

Resources

- While schools retain responsibility for their overall technical support, DEECD assists schools to support their ICT environment through the Technical Support to Schools Program (TSSP).
- Technicians are engaged to provide proactive and reactive specialist technical support for ICT infrastructure, professional development and DEECD initiatives.

Step 18: Conduct parent and community sessions

A 1-to-1 program can impact significantly on parents.

Therefore, they need to support the program. Additionally, research shows students with interested and involved parents demonstrate better educational outcomes. A series of well-structured parent information session will ensure your Netbook Trial is supported and embraced. To obtain a positive result, use a combination of communication tactics, including written documentation, parent meetings and opportunities for one-on-one discussions.

Issues to consider

- Can you demonstrate to parents some of the exciting things students may use their netbooks for?
- Have you provided a range of opportunities for parents to learn about the program?
- How will you provide parents with basic training on the use and care of the netbooks?
- Ensure you step parents through the school policies related to the program and answer all their questions.

Step 19: ICT infrastructure and technical support

Before you can distribute the netbooks to students, you will need to undertake many tasks, including testing, imaging, registering and more.

These tasks can be time-consuming so it is advised to order the netbooks early to help make additional technical support available during this process.

Issues to consider

- Have you engaged extra technical support?
- How much time will you allow for possible delays in delivery?
- Have you built a software image to ensure netbooks will connect to internet, printers and other peripherals?
- How much time have you allowed for technical staff to apply software to all netbooks?
- How will you track serial numbers and register netbooks in the School Management System?
- Will students be required to have a certain school bag or notebook case before devices are distributed?
- Will you provide student training immediately on deployment?
- Will additional training be incorporated into curriculum in initial stages of the program?

Step 20: Distribute student devices

Distribute netbooks and provide ongoing maintenance and development of technology infrastructure that meets the range of learning, teaching and administrative needs across the school.

Issues to consider

- Will you provide student training immediately on deployment?
- Will netbooks be sent home on distribution, or will there be a period of in-school training first?
- What provisions will be made for students entering or leaving mid-term?
- Do parents sign off or attend an introduction session before the netbooks go home?

Resources

- The [Working With the Web](#) website is a guide to ethical and safe use of the internet in Victorian schools.



Evaluating

How do we monitor the impact of 1-to-1 learning?

Step 21: Review and management

Consider how the school will monitor and continually review use of the netbooks, implementation of the eLearning Plan, the infrastructure available and improvements in student learning.

DEECD will coordinate a formal external evaluation in a sample of schools. The research will address two key questions:

1. What have been the impacts of the implementation of the Netbook Trial for the students, teachers and parents?
2. What changes in the use of the specific functions of the netbooks have been noticed over the trial period?

Issues to consider

- Have you kept a learning journal or repository?
- How will you encourage and support participating teachers to set up well-structured, classroom-based research which will help them reflect on their teaching practices?
- What impact has the program had on student learning?
- What were the major issues and how will you overcome these?
- How will you share successes of the program with the wider school community?
- What changes in teaching practice have been evidenced?

Resources

The instruments developed to formally evaluate the Netbook Trial have been made available for schools to use for their own evaluations. These can be found on the [1-to-1 Showcase](#).

Referenced links

- Deploying 1:1 eLearning Environments for the 21st Century (Intel)
http://www.intelworldahead.com/WorldAheadStarterKit_081007.pdf
- 1-to-1 Showcase
http://epotential.education.vic.gov.au/showcase/index.php?showcase_id=62&preview=true
- eLearning Planning Showcase
http://epotential.education.vic.gov.au/showcase/index.php?showcase_id=59
- School Communications Toolkit
<http://www.education.vic.gov.au/management/schooloperations/commstoolkit.htm>
- School Communications Plan Action Planner
<http://www.eduweb.vic.gov.au/edulibrary/public/schadmin/schops/schoolcomms/sctoolkit-7-1-tmp.doc>
- Hints and Ideas for School Communications Plan Action Planner
<http://www.eduweb.vic.gov.au/edulibrary/public/schadmin/schops/schoolcomms/sctoolkit-7-1-tmp.doc>
- ePotential ICT Capabilities Framework
<http://epotential.education.vic.gov.au/continuum.php>
- School ICT Progression Strategy
<https://www.eduweb.vic.gov.au/techroom/tssp/sips>
- Sample Gantt chart outlining key milestones is available on the 1-to-1 Showcase.
http://epotential.education.vic.gov.au/showcase/index.php?showcase_id=62&preview=true
- ePotential ICT Capabilities Resource
<http://epotential.education.vic.gov.au/>
- ICT and eLearning Resources – Professional Learning
<http://www.education.vic.gov.au/studentlearning/teachingresources/elearning.htm#2>
- Effective Professional Learning in Effective Schools
<http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/teacher/ProfLearningInEffectiveSchools.pdf>
- Glen Waverley Secondary College: QTVR
<http://www.gwsc.vic.edu.au/index.cfm?top=302>
- Innovations Next Practice – Echuca
<http://www.education.vic.gov.au/management/schoolimprovement/Isf/default.htm>
- Policy Handbook available on the 1-to-1 Showcase.
http://epotential.education.vic.gov.au/showcase/index.php?showcase_id=62&preview=true
- CyberSafe Classroom
<http://www.education.vic.gov.au/management/elearningsupportservices/www/classroom/default.htm>

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